

**LAND APPLICATION SITE**

**J MARK OSBORNE SITE**

**LUJMO 1-6**

**LUNENBURG COUNTY**

**VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION  
FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS**

**PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS**

A. This land application agreement is made on 12-8-2020 between J. Mark Osborne referred to here as "Landowner", and Recyc Systems, Inc. referred to here as the "Permittee". This agreement remains in effect until it is terminated in writing by either party or, with respect to those parcels that are retained by the Landowner in the event of a sale of one or more parcels, until ownership of all parcels changes. If ownership of individual parcels identified in this agreement changes, those parcels for which ownership has changed will no longer be authorized to receive biosolids or industrial residuals under this agreement.

**Landowner:**

The Landowner is the owner of record of the real property located in Lunenburg, Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) with county documentation identifying owners, attached as Exhibit A.

Table 1.: Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges			
Tax Parcel ID	Tax Parcel ID	Tax Parcel ID	Tax Parcel ID
	32 A 93		
	32 A 90		

☐ Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one: ☐ The Landowner is the sole owner of the properties identified herein.  
☒ The Landowner is one of multiple owners of the properties identified herein.


In the event that the Landowner sells or transfers all or part of the property to which biosolids have been applied within 38 months of the latest date of biosolids application, the Landowner shall:

1. Notify the purchaser or transferee of the applicable public access and crop management restrictions no later than the date of the property transfer; and
2. Notify the Permittee of the sale within two weeks following property transfer.

The Landowner has no other agreements for land application on the fields identified herein. The Landowner will notify the Permittee immediately if conditions change such that the fields are no longer available to the Permittee for application or any part of this agreement becomes invalid or the information herein contained becomes incorrect.

The Landowner hereby grants permission to the Permittee to land apply residuals as specified below, on the agricultural sites identified above and in Exhibit A. The Landowner also grants permission for DEQ staff to conduct inspections on the land identified above, before, during or after land application of permitted residuals for the purpose of determining compliance with regulatory requirements applicable to such application.

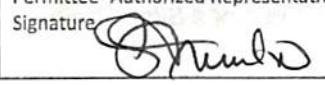
<u>Class B biosolids</u>	<u>Water treatment residuals</u>	<u>Food processing waste</u>	<u>Other industrial sludges</u>
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Printed name <u>J Mark Osborne</u>	Mailing Address <u>691 North Osborne Rd. Victoria, VA. 23974</u>	Landowner Signature 
By: <u>self</u>	Phone No. <u>434-420-3602</u>	
Title* <u>owner</u>		
<input type="checkbox"/> I certify that I have authority to sign for the landowner as indicated by my title as executor, Trustee or Power of attorney, etc. <input type="checkbox"/> I certify that I am a responsible official [or officer] authorized to act on behalf of the following corporation, partnership, proprietorship, LLC, municipality, state or federal agency, etc.		

**Permittee:**

Recyc Systems, Inc., the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia.

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and specifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied.

Printed name <u>Susan Trumbo</u>	Mailing Address <u>PO Box 562, Remington Virginia 22734</u>	Permittee- Authorized Representative Signature 
Title <u>Technical Manager</u>	Phone No. <u>540-547-3300</u>	



Permittee: Recyc Systems, Inc

County or City: Lunenburg

Landowner: T Mark Osborne

### Landowner Site Management Requirements:

I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

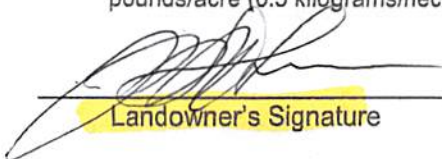
I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.

I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:


1. Notification Signs: I will not remove any signs posted by the Permittee for the purpose of identifying my field as a biosolids land application site, unless requested by the Permittee, until at least 30 days after land application at that site is completed.
2. Public Access
  - a. Public access to land with a high potential for public exposure shall be restricted for at least one year following any application of biosolids.
  - b. Public access to land with a low potential for public exposure shall be restricted for at least 30 days following any application of biosolids. No biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols;
  - c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by DEQ.
3. Crop Restrictions:
  - a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.
  - b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil,
  - c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation.
  - d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids;
  - e. Feed crops shall not be harvested for 30 days after the application of biosolids (60 days if fed to lactating dairy animals).
4. Livestock Access Restrictions:

Following biosolids application to pasture or hayland sites:

  - a. Meat producing livestock shall not be grazed for 30 days,
  - b. Lactating dairy animals shall not be grazed for a minimum of 60 days.
  - c. Other animals shall be restricted from grazing for 30 days;
5. Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;
6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

  
Landowner's Signature

10-18-2022  
Date

  
Operator's Signature

691 Rte Osborne Rd.  
Victoria, VA 23978

434-470-3602  
mailing address & phone

10-18-2022  
Date



**VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION  
FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS**

**PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS**

A. This land application agreement is made on 10-18-2020 between Susan P Osborne referred to here as "Landowner", and Recyc Systems, Inc. referred to here as the "Permittee". This agreement remains in effect until it is terminated in writing by either party or, with respect to those parcels that are retained by the Landowner in the event of a sale of one or more parcels, until ownership of all parcels changes. If ownership of individual parcels identified in this agreement changes, those parcels for which ownership has changed will no longer be authorized to receive biosolids or industrial residuals under this agreement.

**Landowner:**

The Landowner is the owner of record of the real property located in Lunenburg, Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) with county documentation identifying owners, attached as Exhibit A.

Table 1.: Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges			
Tax Parcel ID	Tax Parcel ID	Tax Parcel ID	Tax Parcel ID
	<u>32 A 93</u>		
	<u>32 A 90</u>		

☐ Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one: ☐ The Landowner is the sole owner of the properties identified herein.  
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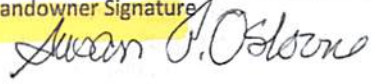
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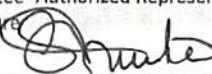
<u>Class B biosolids</u>	<u>Water treatment residuals</u>	<u>Food processing waste</u>	<u>Other industrial sludges</u>
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Printed name <u>Susan P Osborne</u>	Mailing Address <u>691 Rte Osborne Rd. Victoria, VA 22974</u>	Landowner Signature 
By: <u>self</u>	Phone No. <u>434-470-3601</u>	
Title* <u>owner</u>		
<input type="checkbox"/> I certify that I have authority to sign for the landowner as indicated by my title as executor, Trustee or Power of attorney, etc. <input type="checkbox"/> I certify that I am a responsible official [or officer] authorized to act on behalf of the following corporation, partnership, proprietorship, LLC, municipality, state or federal agency, etc.		

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Printed name <u>Susan Trumbo</u>	Mailing Address <u>PO Box 562, Remington Virginia 22734</u>	Permittee- Authorized Representative Signature 
Title <u>Technical Manager</u>	Phone No. <u>540-547-3300</u>	



Permittee: Recyc Systems, Inc

County or City: huerfano

Landowner: Susan D Osborne

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Susan D Osborne  
Landowner's Signature

10-19-2020  
Date

Susan D Osborne  
Operator's Signature

691 Ac 700 assumed.  
VICTORIA, VA- 2357X  
434-470-3601  
mailing address & phone

10-19-2020  
Date

## Landowner Coordination Form

This form is used by the Permittee to identify properties (tax parcels) that are authorized to receive biosolids and/or industrial residuals, and each of the legal landowners of those tax parcels. A Land Application Agreement-Biosolids and Industrial Residuals from original signature must be attached for each legal landowner identified below prior to land application at the identified parcels.

Permittee: Recyc Systems, Inc.Site Name: J. Mark OsborneCounty or City: Lunenburg Co.

Please Print

Signature not required on this page

<u>Tax Parcel ID(s)</u>	<u>Landowners (s)</u>
TM32(A),P93	J. Mark & Susan P. Osborne

# FARM DATA SHEET

<b>SITE NAME:</b>	J. Mark Osborne	<b>COUNTY:</b>	Lunenburg
<b>OWNER:</b>	J. Mark and Susan Osborne	<b>OPERATOR:</b>	J. Mark Osborne
<b>OWNER'S ADDRESS:</b>	691 Pete Osborne Road Victoria, VA 23974	<b>OPERATOR'S ADDRESS:</b>	691 Pete Osborne Road Victoria, VA 23974
<b>OWNER'S TELEPHONE:</b>	434-470-3602	<b>OPERATOR'S TELEPHONE:</b>	434-470-3602
<b>GENERAL FARM TYPE:</b>	Pasture	<b>CELL PHONE:</b>	
<b># CATTLE:</b>	25	<b>EMAIL:</b>	
<b>LAGOON or SLURRY:</b>	None	<b>LATITUDE:</b>	36° 58' 56"
<b>TOPO QUAD:</b>	Lunenburg	<b>LONGITUDE:</b>	78° 15' 13"
<b>COMMENTS:</b>			
* Elizabeth F. Osborne is deceased. J. Mark and Susan			
Osborne inherited her share of the land. *			

8

# RECYC SYSTEMS, INC

## FIELD DATA SHEET

Field Identification	Gross Acres	Environmentally Sensitive Soils				Hydro Map	Tax Map #	FSA Tract #
		Water Table	Bed Rock/Shallow	Surf/Leach	Freq Flood			
LUJMO 1	27.4	12B(Dec-Apr) 12C2(Dec-Apr)	-	-	-	CM06	TM32(A),P93	T1164 Fields 6,7,8
LUJMO 2	10.8	12B(Dec-Apr) 12C2(Dec-Apr) 18B(Dec-May)	-	-	-	CM06	TM32(A),P93	T1164 Fields 2,5
LUJMO 3	8.1	12C2(Dec-Apr)	-	-	-	CM06	TM32(A),P93	T1164 Fields 0,4
LUJMO 4	13.2	12C2(Dec-Apr) 18B(Dec-May)	-	-	-	CM06	TM32(A),P93	T1164 Field 2
LUJMO 5	8.8	-	-	-	-	CM06	TM32(A),P93	T1164 Field 3
LUJMO 6	15.0	-	-	-	-	CM06	TM32(A),P93	T1164 Fields 1,2
TOTAL ACRES IN SITE	83.3							



Report Number: 12-156-0509

Account Number: 70594



www.aleastern.com

# A&L Eastern Laboratories

7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446

Send To: RECYC SYSTEMS INC  
SUSAN TRUMBO  
8455 WHITESHOP RD  
CULPEPER VA 22701

Grower:  
J MARK OSBORNE/LUTMO  
LUNENBURG

Submitted By: J B CRENSHAW  
Farm ID:

## SOIL ANALYSIS REPORT

Analytical Method(s):  
Mehlich 3

Date Received: 06/04/2012

Date Of Analysis: 06/05/2012

Date Of Report: 06/06/2012

Sample ID Field ID	Lab Number	Organic Matter			Phosphorus				Potassium		Magnesium		Calcium		Sodium		pH		Acidity	C.E.C
		%	Rate	ENR lbs/A	Mehlich 3 ppm	Rate	Reserve ppm	Rate	K ppm	Rate	Mg ppm	Rate	Ca ppm	Rate	Na ppm	Rate	Soil pH	Buffer Index	H meq/100g	meq/100g
1A	03556	2.0	L 7	79	14	L			28	VL	234	H	879	M			6.0	6.81	1.2	7.6
1B	03557	2.2	L 8	84	13	VL			24	VL	216	H	848	M			6.2	6.85	0.8	6.9
2	03558	2.3	L 8	88	19	L			33	VL	156	H	766	M			6.6	6.90	0.3	5.5
3	03559	3.4	M 10	107	24	L			41	VL	229	H	1002	M			6.5	6.87	0.6	7.6
4	03560	4.0	M 11	117	48	M			231	VH	297	H	1095	M			6.6	6.88	0.5	9.1

Sample ID Field ID	Percent Base Saturation					Nitrate	Sulfur	Zinc	Manganese	Iron	Copper	Boron	Soluble Salts	Chloride	Aluminum
	K	Mg	Ca	Na	H	NO <sub>3</sub> N	S	Zn	Mn	Fe	Cu	B	SS	Cl	Al
	%	%	%	%	%	ppm   Rate	ppm   Rate	ppm   Rate	ppm   Rate	ppm   Rate	ppm   Rate	ppm   Rate	mg/cm   Rate	ppm   Rate	ppm
1A	0.9	25.7	57.8		15.4										
1B	0.9	26.1	61.4		12.2										
2	1.5	23.6	69.6		6.0										
3	1.4	25.1	65.9		7.4										
4	6.5	27.2	60.2		5.9										

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

Explanation of symbols: % (percent), ppm (parts per million), lbs/A (pounds per acre), ms/cm (milli-mhos per centimeter), meq/100g (milli-equivalent per 100 grams). Conversions: ppm x 2 = lbs/A, Soluble Salts ms/cm x 640 = ppm.

This report applies to sample(s) tested. Samples are retained a maximum of thirty days after testing.

Analysis prepared by: A&L Eastern Laboratories, Inc.

by: *Paucic McGroary*

Paucic McGroary

Report Number: 12-156-0509

Account Number: 70594



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# A&L Eastern Laboratories

7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446

Send To: RECYC SYSTEMS INC  
SUSAN TRUMBO  
8455 WHITESHOP RD  
CULPEPER VA 22701

Grower:  
J MARK OSBORNE/LUTMO  
LUNENBURG

Submitted By: J B CRENSHAW  
Farm ID:

Date Received: 06/04/2012

Date Of Report: 06/06/2012

## SOIL FERTILITY RECOMMENDATIONS

Sample ID Field ID	Intended Crop	Yield Goal	Lime Tons/A	Nitrogen N lb/A	Phosphate P <sub>2</sub> O <sub>5</sub> lb/A	Potash K <sub>2</sub> O lb/A	Magnesium Mg lb/A	Sulfur S lb/A	Zinc Zn lb/A	Manganese Mn lb/A	Iron Fe lb/A	Copper Cu lb/A	Boron B lb/A
1A	Adjust pH to 6.8	0	1.3				0						
1B	Adjust pH to 6.8	0	1.3				0						
2	Adjust pH to 6.8	0	1.0				0						
3	Adjust pH to 6.8	0	1.0				0						
4	Adjust pH to 6.8	0	1.0				0						

### Comments:

"The recommendations are based on research data and experience, but NO GUARANTEE or WARRANTY expressed or implied, concerning crop performance is made."

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*Paucic McGeary*

Paucic McGroary

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Send To: RECYC SYSTEMS INC  
SUSAN TRUMBO  
8455 WHITESHOP RD  
CULPEPER VA 22701

Grower:

J MARK OSBORNE/LUTMO  
LUNENBURG

Submitted By: J B CRENSHAW

Farm ID:

## SOIL ANALYSIS REPORT

Analytical Method(s):

Mehlich 3

Date Received: 06/04/2012

Date Of Analysis: 06/05/2012

Date Of Report: 06/06/2012

Sample ID Field ID	Lab Number	Organic Matter			Phosphorus				Potassium		Magnesium		Calcium		Sodium		pH		Acidity	C.E.C
		%	Rate	ENR lbs/A	Mehlich 3 ppm	Rate	Reserve ppm	Rate	K ppm	Rate	Mg ppm	Rate	Ca ppm	Rate	Na ppm	Rate	Soil pH	Buffer Index	H meq/100g	meq/100g
5	03561	3.3	M 10	103	41	M		65	L	258	H	1116	M			6.3	6.84	0.9	8.8	
6	03562	3.1	M 10	101	20	L		63	L	209	H	865	M			6.0	6.82	1.1	7.4	

Sample ID Field ID	Percent Base Saturation					Nitrate	Sulfur	Zinc	Manganese	Iron	Copper	Boron	Soluble Salts	Chloride	Aluminum									
	K %	Mg %	Ca %	Na %	H %	NO <sub>3</sub> N ppm	Rate	S ppm	Rate	Zn ppm	Rate	Mn ppm	Rate	Fe ppm	Rate	Cu ppm	Rate	B ppm	Rate	SS ms/cm	Rate	Cl ppm	Rate	Al ppm
5	1.9	24.4	63.4		10.6																			
6	2.2	23.5	58.4		15.3																			

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

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Analysis prepared by: A&L Eastern Laboratories, Inc.

by: *Paucic McGroary*

Paucic McGroary



Report Number: 12-156-0509

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8455 WHITESHOP RD  
CULPEPER VA 22701

Grower:

J MARK OSBORNE/LUTMO  
LUNENBURG

Submitted By: J B CRENSHAW

Farm ID:

Date Received: 06/04/2012

Date Of Report: 06/06/2012

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5	Adjust pH to 6.8	0	1.0				0						
6	Adjust pH to 6.8	0	1.3				0						

### Comments:

"The recommendations are based on research data and experience, but NO GUARANTEE or WARRANTY expressed or implied, concerning crop performance is made."

Our reports and letters are for the exclusive and confidential use of our clients, and may not be reproduced in whole or part, nor may any reference be made to the work, the results, or the company in any advertising, news release, or other public announcements without obtaining our prior written authorization. Copy right 1977.

Pauric McGroary

## NUTRIENT MANAGEMENT PLAN IDENTIFICATION

### Operator

J. Mark Osborne Last Name  
691 Pete Osborne Road  
Victoria, VA 23974  
434-470-3602

Integrator:None

### Farm Coordinates

Easting: 0, Northing: 0, zone: 17

### Watershed Summary

watershed: CM06  
county: Lunenburg

### Nutrient Management Planner

~~Harriette Moody~~  
~~10070 Elmwood Road~~  
~~Blackstone, VA 23024~~  
Certification Code: 311

### Acreage Use Summary

Total Acreage in this plan: 83.3

Cropland: 0.  
Hayland: 83.3  
Pasture: 0.  
Specialty: 0.

### Livestock Summary

Beef Cattle 0  
Dairy Cattle 0  
Poultry 0  
Swine 0  
Other 0

### Manure Production Balance

	Imported	Produced	Exported	Used	Net
kgals	0.	0.	0.	0.	0.
tons	0.	0.	0.	0.	0.

Plan written 1/1/2013  
Valid until 1/1/2014

Signature: \_\_\_\_\_

Planner

date

# Nutrient Management Plan Balance Sheet (Spring, 2013-Spring, 2014)

J. Mark Osborne

~~Blanner-Harrison Moody (cert. No. 911)~~

Tract: T1164

Location: Lunenburg

(N = N based, 1P = P based, 1.5P = P based at 1.5 removal, 0P = No P allowed)

Field CFSA No. /Name	Size (ac) Total/ Used	Yr.	Crop	Needs N-P-K (lbs/ac)	Leg /Man Resid	Manure/Biosld Rate & Type (season)	IT (d)	Man/Bios N-P-K (lbs/ac)	Net = Needs - appld N-P-K (lbs/ac)	Sum P rem ored	Commercial N-P-K (lbs/ac)	Notes	
0/LUJMO 1(N)	27/27	2013	Hay/Pasture	100-80-130	0/0				100-80-130	N/A			
0/LUJMO 2(N)	11/11	2013	Hay/Pasture	100-70-130	0/0				100-70-130	N/A			
0/LUJMO 3(N)	8/8	2013	Hay/Pasture	100-80-120	0/0				100-80-120	N/A			
0/LUJMO 4(N)	13/13	2013	Hay/Pasture	100-40-0	0/0				100-40-0	N/A			
0/LUJMO 5(N)	9/9	2013	Hay/Pasture	100-40-110	0/0				100-40-110	N/A			
0/LUJMO 6(N)	15/15	2013	Hay/Pasture	100-70-110	0/0				100-70-110	N/A			

Commercial Application Methods:

br - Broadcast ba - Banded sd - Sidedress

Notes:



**J. Mark Osborne Narrative**

This is the J. Mark Osborne farm located in Lunenburg County. The farm consists of pasture fields.

This is a partial plan written for the purpose of obtaining a biosolids permit. Biosolids application has not been shown since it is uncertain when a permit will be obtained. The partial plan will be revised prior to biosolids application to obtain a target biosolids application rate.

**Soil Test Summary**

Tract	Field	Acre	Date	P2O5	K2O	Lab	Soil pH	Lime Date	rec. lime tons/Ac
T1164	LUJMO 1	27	2012-Sp	L (14 P ppm)	L (26 K ppm)	A&L Mill	6.1		
T1164	LUJMO 2	11	2012-Sp	L+ (19 P ppm)	L (33 K ppm)	A&L Mill	6.6		
T1164	LUJMO 3	8	2012-Sp	M- (24 P ppm)	L+ (41 K ppm)	A&L Mill	6.5		
T1164	LUJMO 4	13	2012-Sp	H- (48 P ppm)	VH (231 K ppm)	A&L Mill	6.6		
T1164	LUJMO 5	9	2012-Sp	M+ (41 P ppm)	M- (65 K ppm)	A&L Mill	6.3		
T1164	LUJMO 6	15	2012-Sp	L+ (20 P ppm)	M- (63 K ppm)	A&L Mill	6.		

### Field Productivities for Major Crops

Tract Name	Tract/ Field	Field Name	Acres	Predominant Soil Series	Corn	Small Grain	Alfalfa	Grass Hay	Environmental Warnings
T1164	0/0	LUJMO 1	27	Iredell	V	IV	Not Suited	IV	
	0/0	LUJMO 2	11	Cecil	V	IV	Not Suited	IV	
	0/0	LUJMO 3	8	Cecil	V	IV	III	IV	
	0/0	LUJMO 4	13	Cecil	V	V	Not Suited	IV	
	0/0	LUJMO 5	9	Cecil	IVb	IV	III	IV	
	0/0	LUJMO 6	15	Cecil	IVb	IV	III	IV	

### Yield Range

Field Productivity Group	Corn Grain Bu/Acre	Barley/Intensive Wheat Bu/Acre	Std. Wheat Bu/Acre	Alfalfa Tons/Acre	Grass/Hay Tons/Acre
I	>170	>80	>64	>6	>4.0
II	150-170	70-80	56-64	4-6	3.5-4.0
III	130-150	60-70	48-56	<4	3.0-3.5
IV	100-130	50-60	40-48	NA	<3.0
V	<100	<50	<40	NA	NA



## Farm Summary Report

**Plan:**            **New Plan**        **Spring, 2013 - Spring, 2014**

**Farm Name:**    **J. Mark Osborne**

**Location:**        Lunenburg

**Specialist:**      Harrison Moody

**N-based Acres:** 83.3

**P-based Acres:** 0.0

**Tract Name:**    **T1164**

**FSA Number:**    0

**Location:**                    Lunenburg

**Field Name:**        **LUJMO 1**

**Total Acres:**    27.40    **Usable Acres:** 27.40

**FSA Number:**    0

**Tract:**                **T1164**

**Location:**                    Lunenburg

**Slope Class:**        C            **Hydrologic Group:**        B

**Riparian buffer width:** 0 ft

**Distance to stream:** 0 ft

### **Conservation Practices:**

Pasture (>75% cover)

### **P-Index Summary**

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

%slope: 0.0	Slope Len: 0.	R factor: 0.0	K factor: 0.0
T factor: 0.0	P factor: 1.0	Cmax: 0.000	Erosion: 0.0 tons/acre

### **Soil Test Results:**

DATE	PH	P	K		Lab
Sp-2012	6.1	L(14 P ppm)	L(26 K ppm)	A&L MIII	

**Soils:**

PERCENT	SYMBOL	SOIL SERIES
28	5B2	Cecil
9	5C2	Cecil
30	12B	Iredell
19	12C2	Iredell
14	19D2	Pacolet

**Field Warnings:****Crop Rotation:**

PLANTED	YIELD	CROP NAME
2013-Sp	1.7 * ton	Hay/Pasture - No Till

**Field Name:** LUJMO 2

Total Acres: 10.80 Usable Acres: 10.80

FSA Number: 0

Tract: T1164

Location: Lunenburg

Slope Class: B Hydrologic Group: B

Riparian buffer width: 0 ft

Distance to stream: 0 ft

**Conservation Practices:**

Pasture (&gt;75% cover)

**P-Index Summary**

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

%slope: 0.0	Slope Len: 0.	R factor: 0.0	K factor: 0.0
T factor: 0.0	P factor: 1.0	Cmax: 0.000	Erosion: 0.0 tons/acre

**Soil Test Results:**

DATE	PH	P	K	Lab
------	----	---	---	-----

Sp-2012      6.6      L+(19 P ppm)      L(33 K ppm)      A&L Mill

**Soils:**

PERCENT	SYMBOL	SOIL SERIES
61 5B	5B2	Cecil 1
37 12	12B	Irado 1
12 12C	12C2	Irado 1
1 18	18B	Orange e

**Field Warnings:**

**Crop Rotation:**

PLANTED	YIELD	CROP NAME
2013-Sp	1.7 * ton	Hay/Pasture - No Till

**Field Name:** LUJMO 3

Total Acres: 8.10 Usable Acres: 8.10

FSA Number: 0

Tract: T1164

Location: Lunenburg

Slope Class: B Hydrologic Group: B

Riparian buffer width: 0 ft  
Distance to stream: 0 ft

**Conservation Practices:**

Pasture (>75% cover)

**P-Index Summary**

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

%slope: 0.0	Slope Len: 0.	R factor: 0.0	K factor: 0.0
T factor: 0.0	P factor: 1.0	Cmax: 0.000	Erosion: 0.0 tons/acre

**Soil Test Results:**

DATE      PH      P

K

Lab



Sp-2012      6.5      M-(24 P ppm)      L+(41 K ppm)      A&L MIII

**Soils:**

PERCENT	SYMBOL	SOIL SERIES
88	5B2	Cecil
12	12C2	Iredell

**Field Warnings:**

**Crop Rotation:**

PLANTED	YIELD	CROP NAME
2013-Sp	1.8 * ton	Hay/Pasture - No Till

**Field Name:**      **LUJMO 4**

Total Acres: 13.20    Usable Acres: 13.20

FSA Number: 0

Tract: T1164

Location: Lunenburg

Slope Class: B      Hydrologic Group: C

Riparian buffer width: 0 ft

Distance to stream: 0 ft

**Conservation Practices:**

Pasture (>75% cover)

**P-Index Summary**

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

%slope: 0.0	Slope Len: 0.	R factor: 0.0	K factor: 0.0
T factor: 0.0	P factor: 1.0	Cmax: 0.000	Erosion: 0.0 tons/acre

**Soil Test Results:**

DATE	PH	P	K	Lab
Sp-2012	6.6	H-(48 P ppm)	VH(231 K ppm)	A&L MIII

**Soils:**

PERCENT	SYMBOL	SOIL SERIES
35	5B2 Cecil	Cecil
6	5C2 Cecil	Cecil
31	12C2 Iredell	Iredell
28	18B Orange	Orange

**Field Warnings:****Crop Rotation:**

PLANTED	YIELD	CROP NAME
2013-Sp	1.6 * ton	Hay/Pasture - No Till

**Field Name: LUJMO 5**

Total Acres: 8.80 Usable Acres: 8.80

FSA Number: 0

Tract: T1164

Location: Lunenburg

Slope Class: B Hydrologic Group: B

Riparian buffer width: 0 ft

Distance to stream: 0 ft

**Conservation Practices:**

Pasture (>75% cover)

**P-Index Summary**

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

%slope: 0.0 Slope Len: 0. R factor: 0.0 K factor: 0.0

T factor: 0.0 P factor: 1.0 Cmax: 0.000 Erosion: 0.0 tons/acre

**Soil Test Results:**

DATE	PH	P	K		Lab
Sp-2012	6.3	M+(41 P ppm)	M-(65 K ppm)	A&L Mill	

**Soils:**

PERCENT	SYMBOL	SOIL SERIES
92	5B2	Cecil
6	5C2	Cecil
3	23D2	Wedowee

**Field Warnings:****Crop Rotation:**

PLANTED	YIELD	CROP NAME
2013-Sp	1.9 * ton	Hay/Pasture - No Till

**Field Name:** LUJMO 6

Total Acres: 15.00 Usable Acres: 15.00

FSA Number: 0

Tract: T1164

Location: Lunenburg

Slope Class: C Hydrologic Group: B

Riparian buffer width: 0 ft

Distance to stream: 0 ft

**Conservation Practices:**

Pasture (&gt;75% cover)

**P-Index Summary**

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

%slope: 0.0	Slope Len: 0.	R factor: 0.0	K factor: 0.0
T factor: 0.0	P factor: 1.0	Cmax: 0.000	Erosion: 0.0 tons/acre

**Soil Test Results:**

DATE	PH	P	K		Lab
Sp-2012	6.0	L+(20 P ppm)	M-(63 K ppm)	A&L MIII	

**Soils:**

PERCENT	SYMBOL	SOIL SERIES
52	5B2	Cecil
48	5C2	Cecil

**Field Warnings:****Crop Rotation:**

PLANTED	YIELD	CROP NAME
2013-Sp	1.9 * ton	Hay/Pasture - No Till



# MAPS



**(Biosolids Land Application)**



**Scale:** 1 inch = 2 miles

LUJMO 1-6

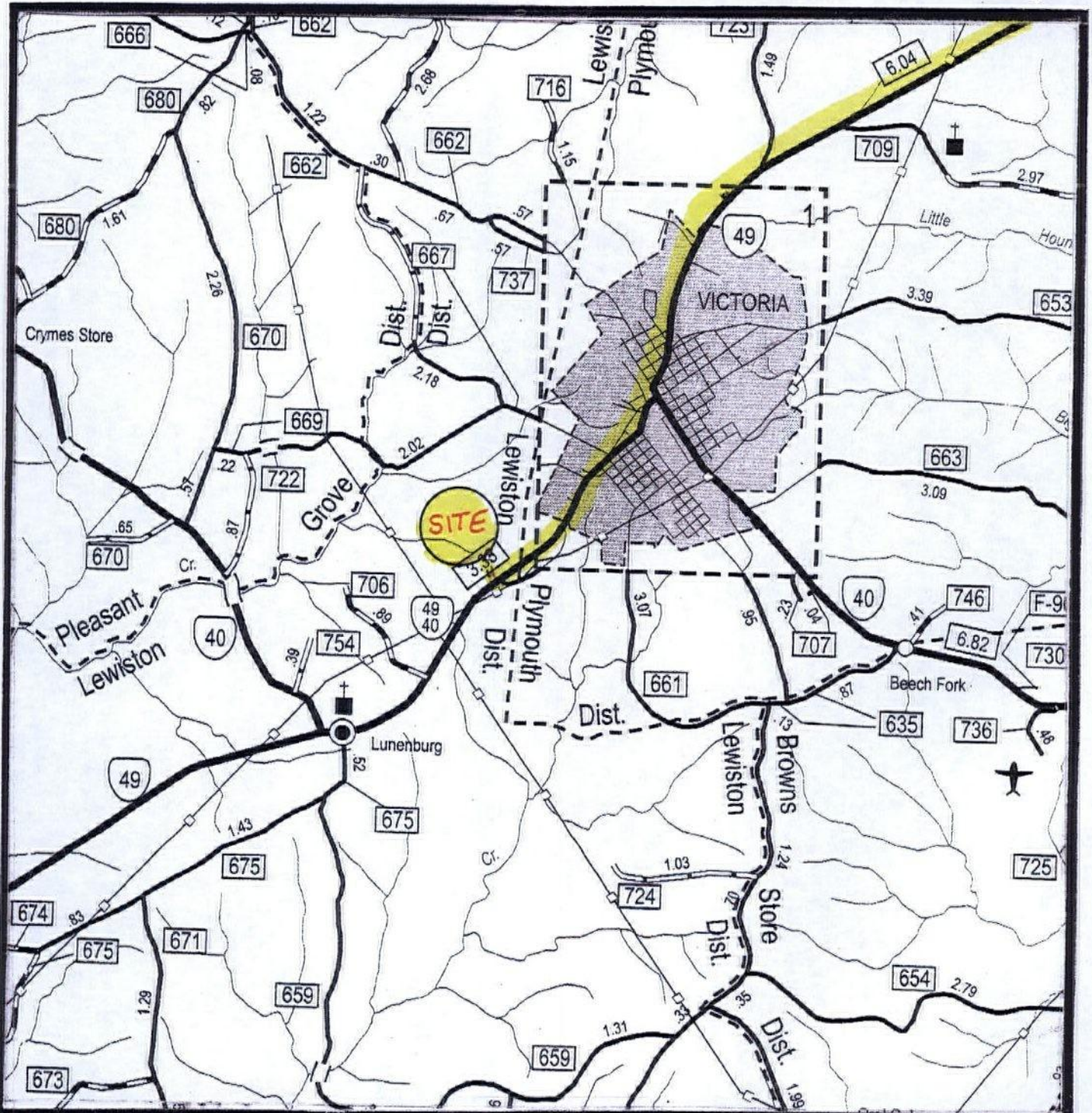
## VICINITY MAP





# Recyc Systems<sup>TM</sup> Inc.

(Biosolids Land Application)



**Scale:** 1 inch = 1 mile

LUJMO 1-6

**VICINITY MAP**





**(Biosolids Land Application)**



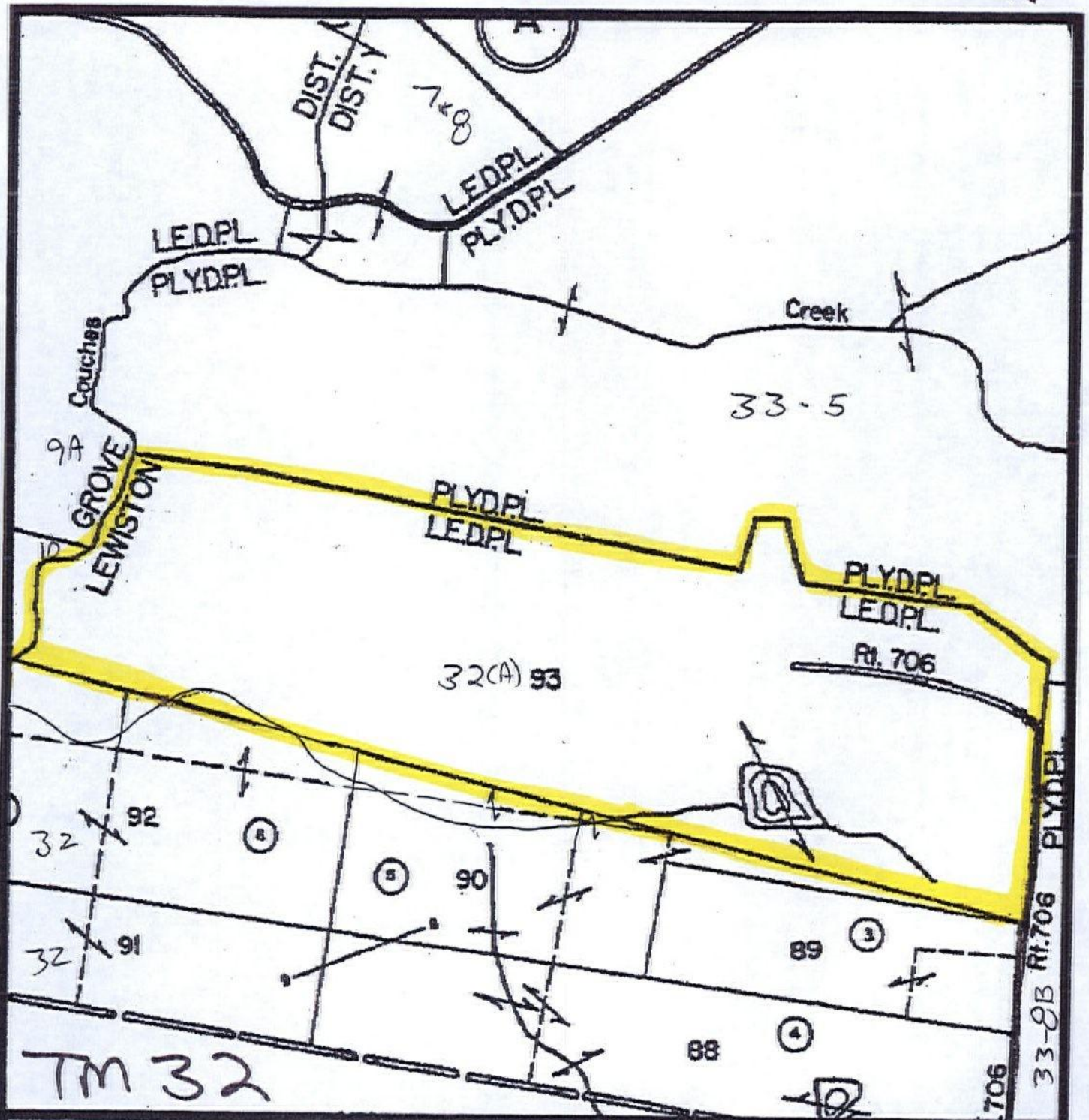
## TAX MAP





# Recyc Systems<sup>TM</sup> Inc.

(Biosolids Land Application)



**Scale:** 1 inch = 660 feet

LUMMO 1-6

**TAX MAP**





# ADJOINING LANDOWNERS

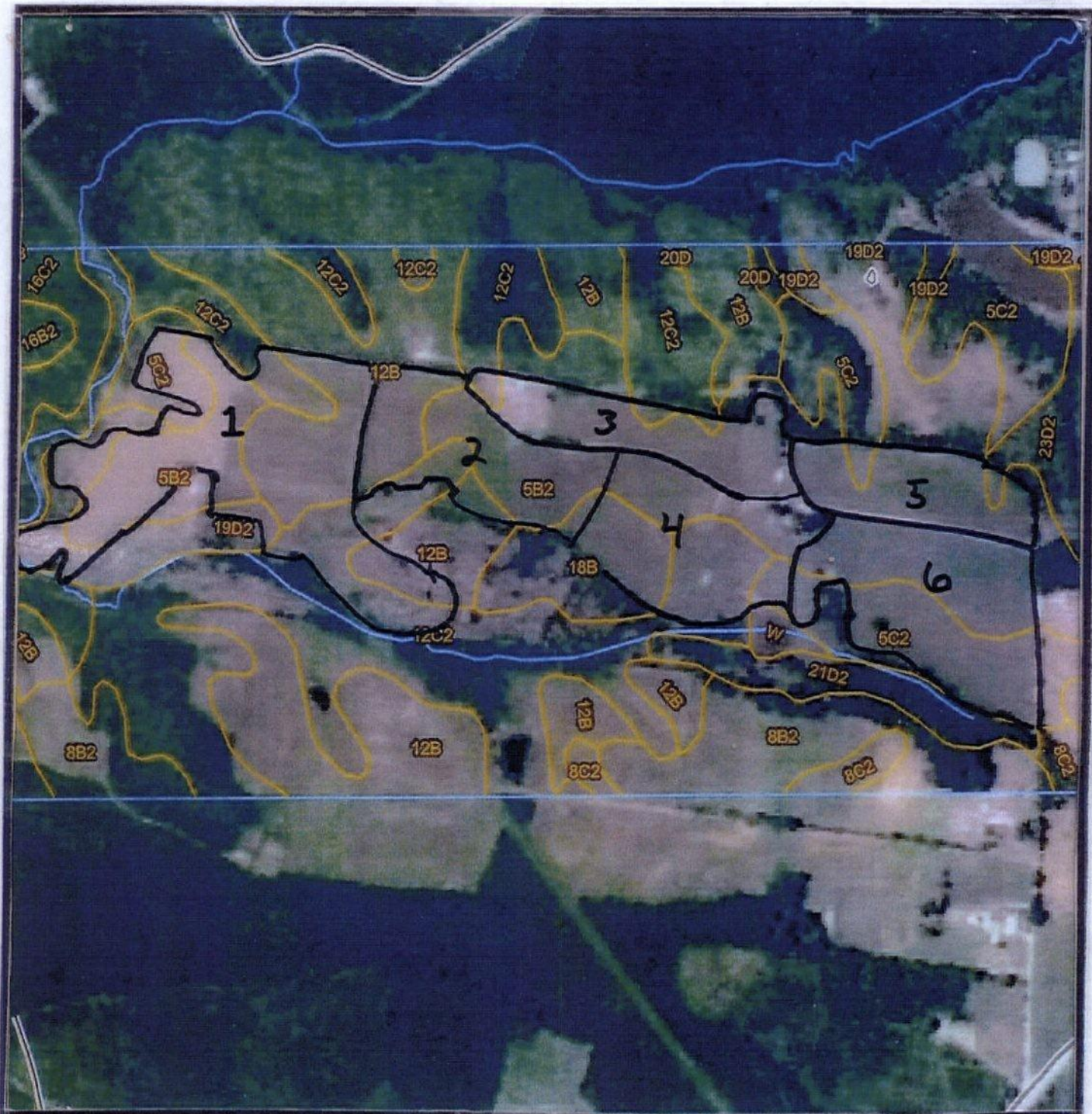
**J. Mark Osborne**

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## LUNENBURG COUNTY

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Tax Map	Parcel #	Owner Name(s)
32-A	9A	Eugene H. Overton
	10	Edith Marie Shelton
	89	Patricia Hood Dunnavant
	90	Elizabeth F. and John M. or Susan P. Osborne
	92	Leslie and Nancy Green
33-A	5	William Curtis Bragg
	8B	Allen W. C. or Barbara M. and Melanie A. Slayton



**Scale:** 1 inch = 660 feet

LUJMO 1-6

SOIL MAP







T#1164

**Scale:** 1 inch = 660 feet

LUJMO 1-6

**AERIAL MAP**





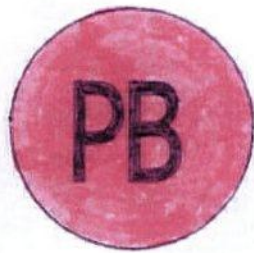
# Legend for Site Plan



House and Well



Well / Spring



Perennial Streams & Surface



Wet Spot



Intermittent Stream / Drainage



Trees and Woods



Private Drive



Rock / Rocky Area



Sinkhole



Severely Eroded Spot



State Road



Field Boundary / Fence



Property Line



Slope

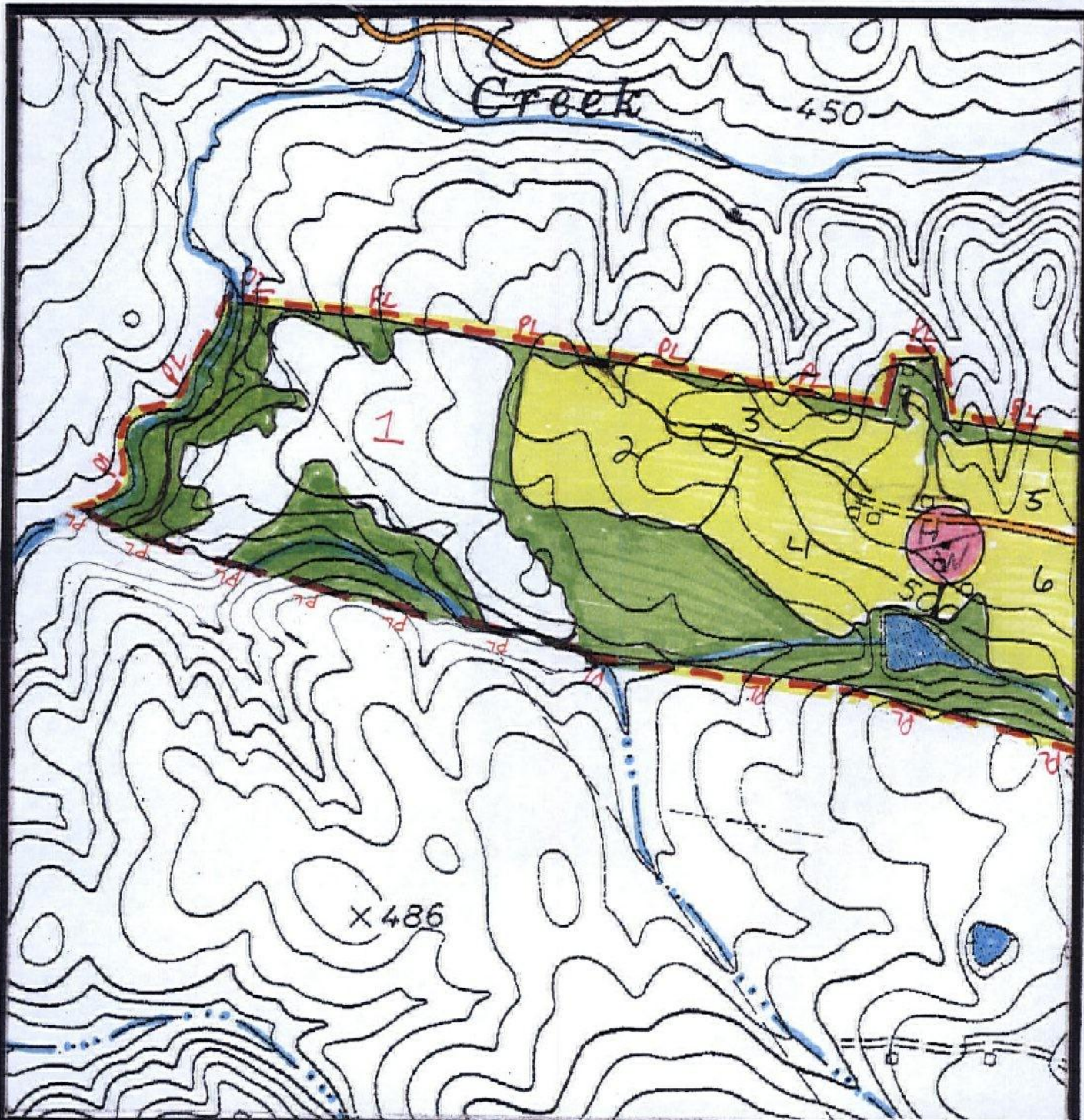


Frequent Flooding



# Recyc Systems<sup>TM</sup> Inc.

(Biosolids Land Application)



**Scale:** 1 inch = 660 feet

LUJMO 1

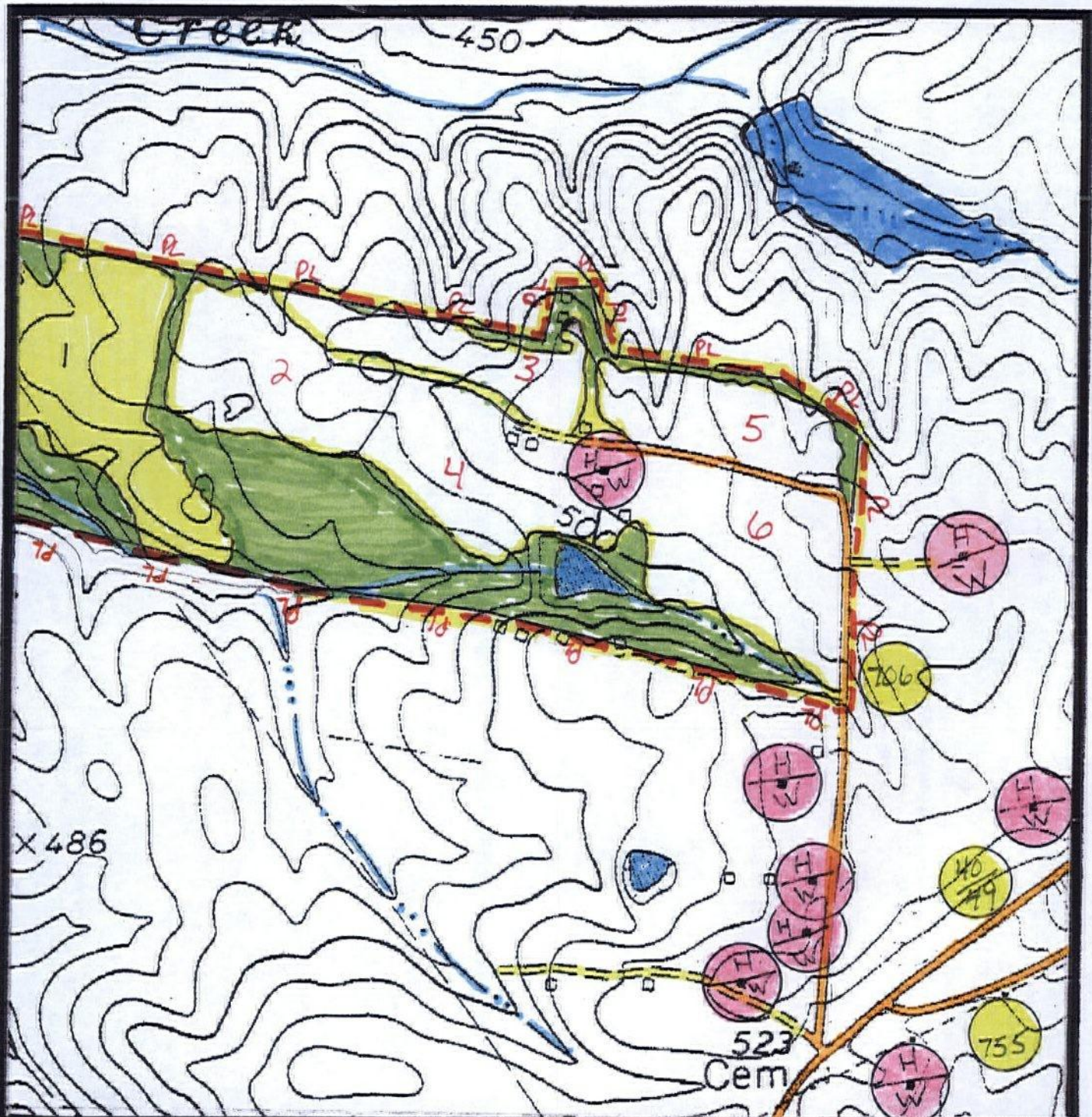
**SITE PLAN**





# Recyc Systems<sup>TM</sup> Inc.

(Biosolids Land Application)



**Scale:** 1 inch = 660 feet

LUJMO 2-6

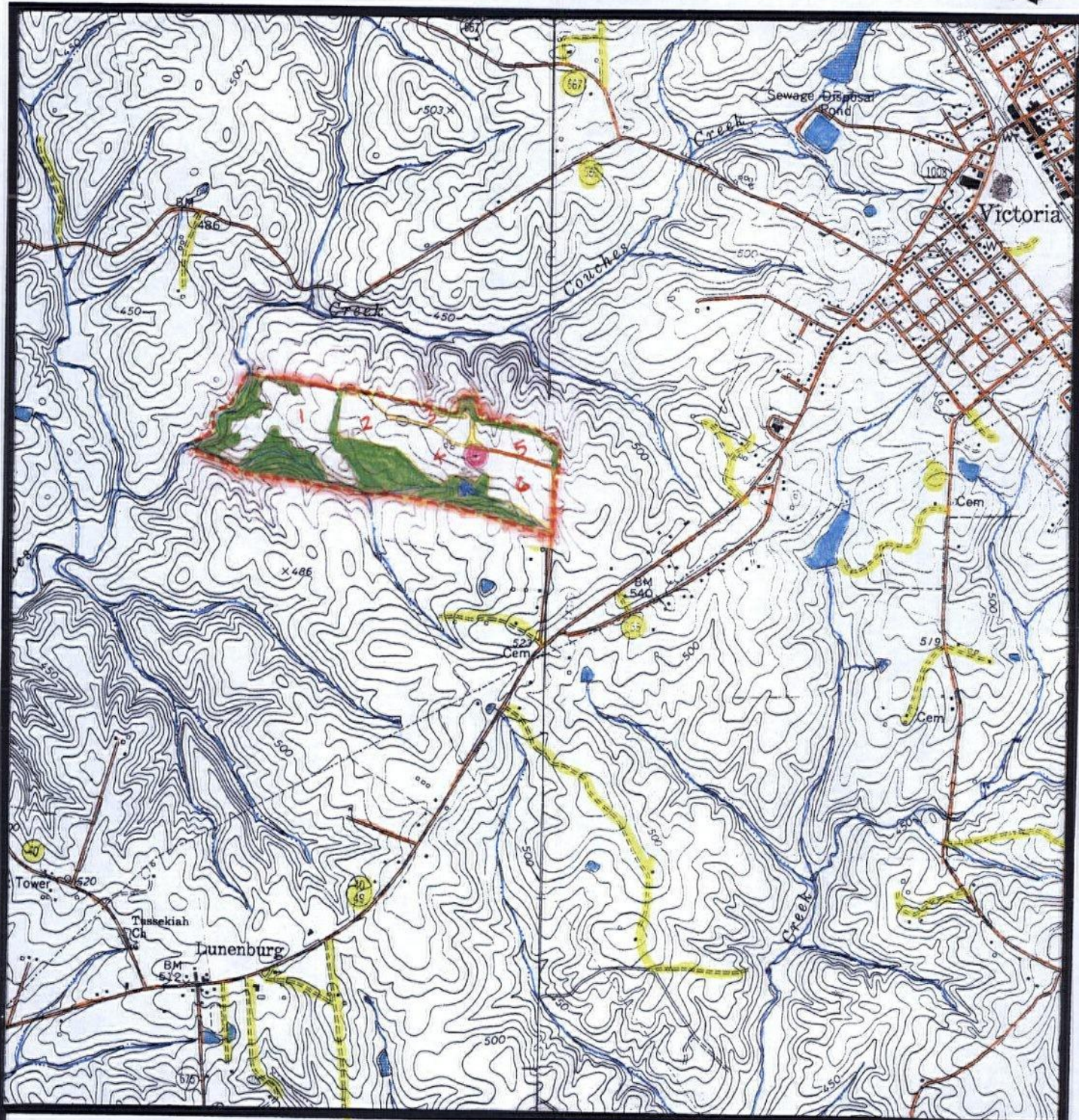
**SITE PLAN**





# Recyc Systems<sup>TM</sup> Inc.

(Biosolids Land Application)



**Scale:** 1 inch = 2,000 feet

LUJMO 1-6

**TOPOGRAPHIC MAP**

